



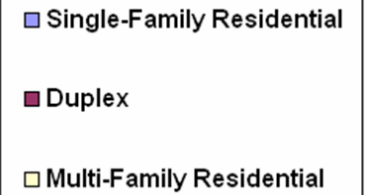
# Housing Analysis

September 24, 2007

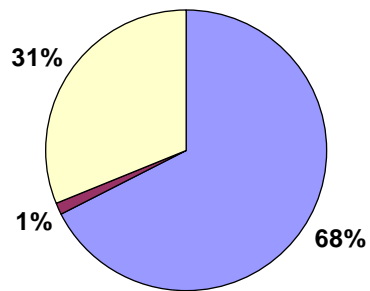
# Where Have We Been?



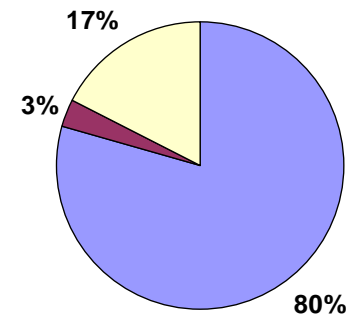
# 1990 U.S. Census



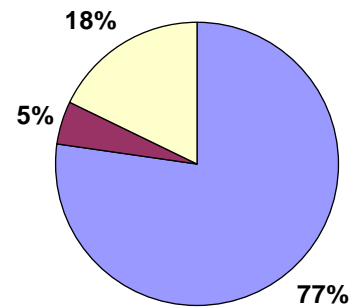
**Lenexa**



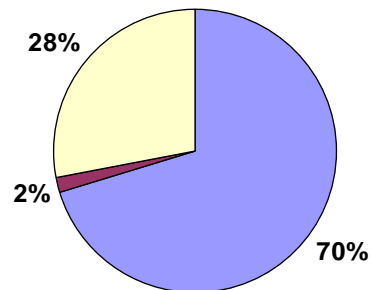
**Olathe**



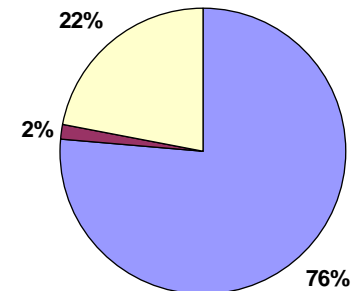
**Gardner**



**Overland Park**



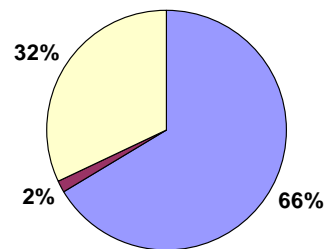
**Johnson County**



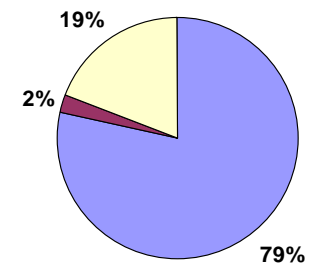
# 2000 U.S. Census

- Single-Family Residential
- Duplex
- Multi-Family Residential

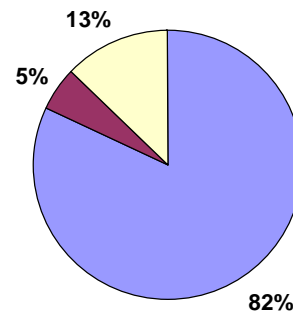
Lenexa



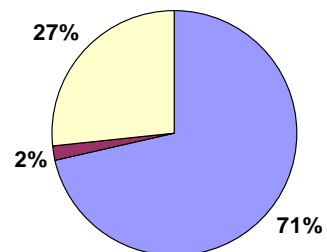
Olathe



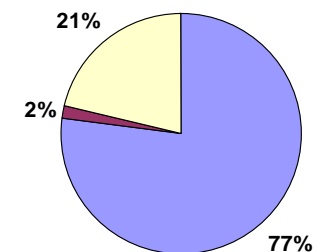
Gardner



Overland Park



Johnson County

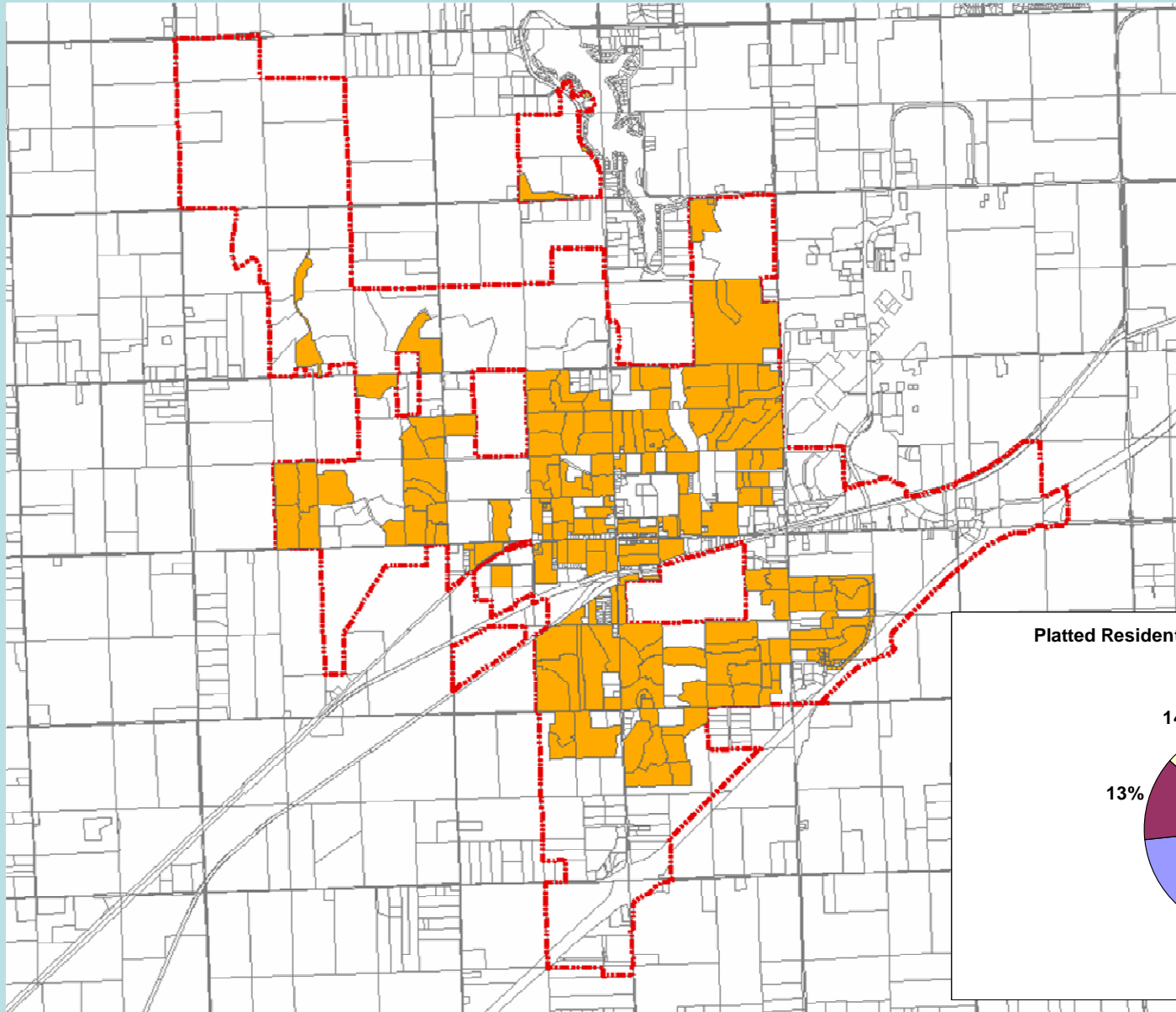


**Exhibit III-2.**  
**Distribution by Tenure of Johnson County Units, 2000**

	Rental Units	Share of All Occupied Units	Owner Occupied Units	Share of All Occupied Units
<b>Johnson County</b>	<b>48,380</b>	<b>28%</b>	<b>126,190</b>	<b>72%</b>
Countryside	6	5%	123	95%
De Soto	564	34%	1,078	66%
Edgerton	78	16%	396	84%
Fairway	172	10%	1,609	90%
<b>Gardner</b>	<b>918</b>	<b>28%</b>	<b>2,389</b>	<b>72%</b>
Lake Quivira	6	2%	375	98%
Leawood	712	7%	9,129	93%
Lenexa	5,808	37%	9,766	63%
Merriam	1,759	36%	3,080	64%
Mission	2,600	51%	2,519	49%
Mission Hills	11	1%	1,273	99%
Mission Woods	2	3%	75	97%
Olathe	9,200	28%	23,114	72%
Overland Park	18,954	32%	40,749	68%
Prairie Village	1,591	16%	8,242	84%
Roeland Park	507	17%	2,500	83%
Shawnee	4,747	26%	13,775	74%
Spring Hill	298	31%	675	69%
Westwood	88	12%	623	88%
Westwood Hills	11	6%	159	94%
Balance of County	348	7%	4,541	4%

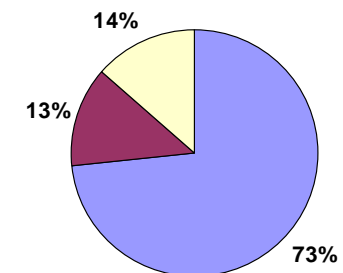
Source: U.S. Census Bureau, 2000 Census.

# Existing Development



- Single-Family Residential
- Duplex
- Multi-Family Residential

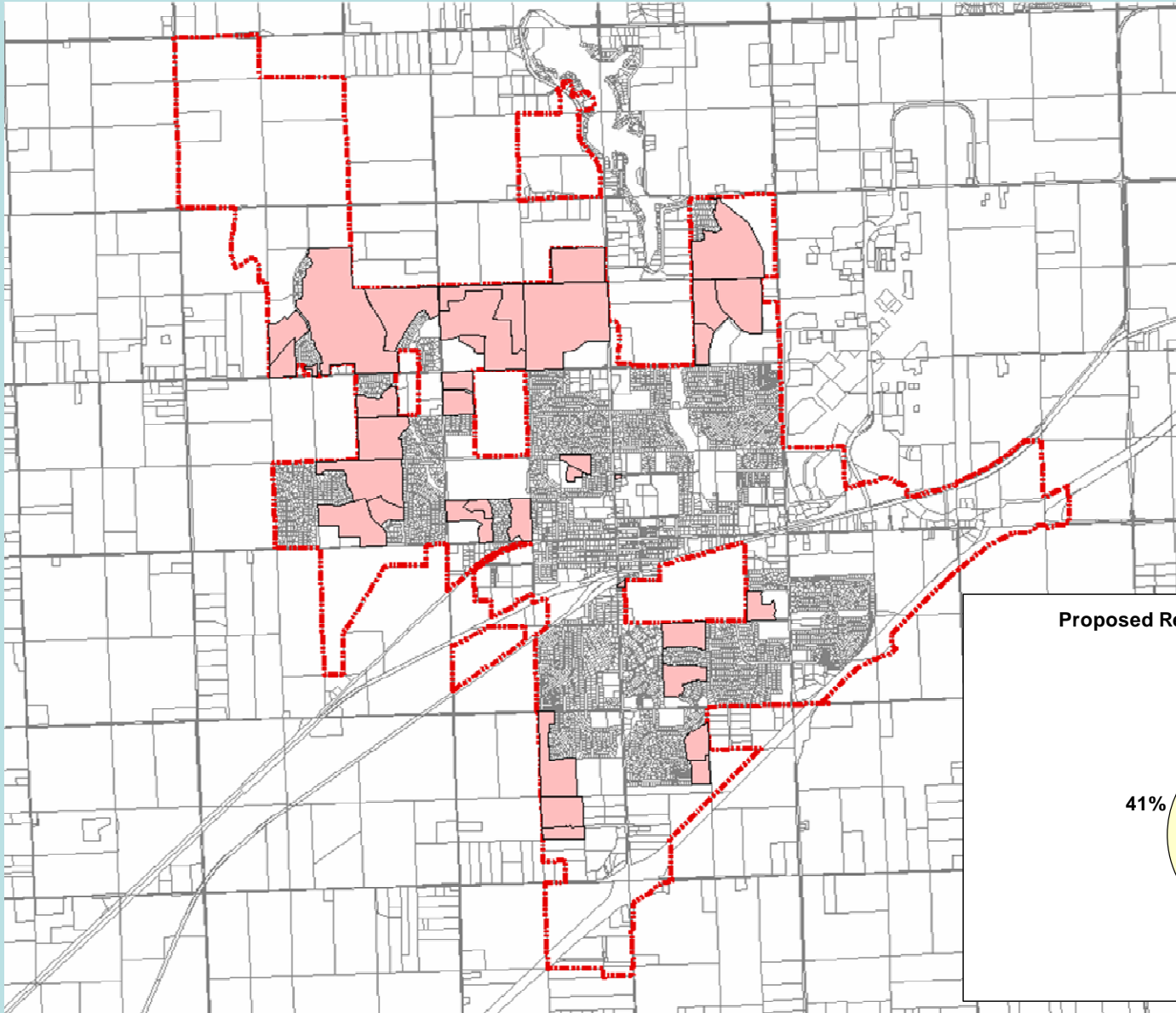
Platted Residential Units For the City of Gardner



# Where Are We Going?

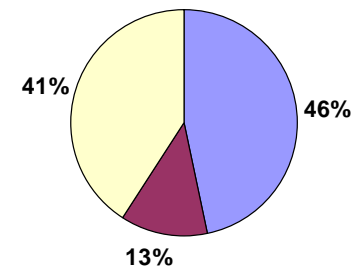


# Proposed Development

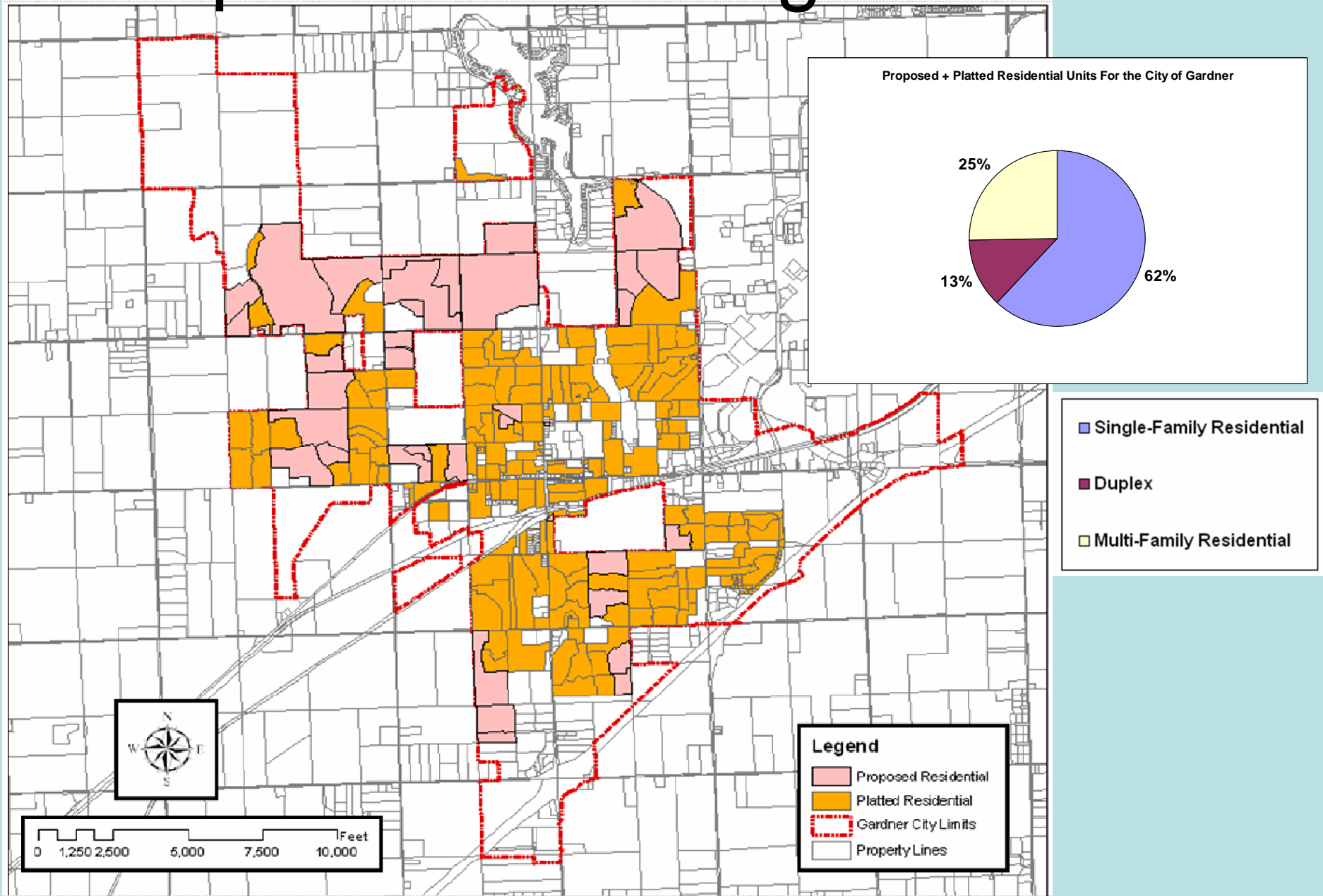


- Single-Family Residential
- Duplex
- Multi-Family Residential

Proposed Residential Units For The City of Gardner



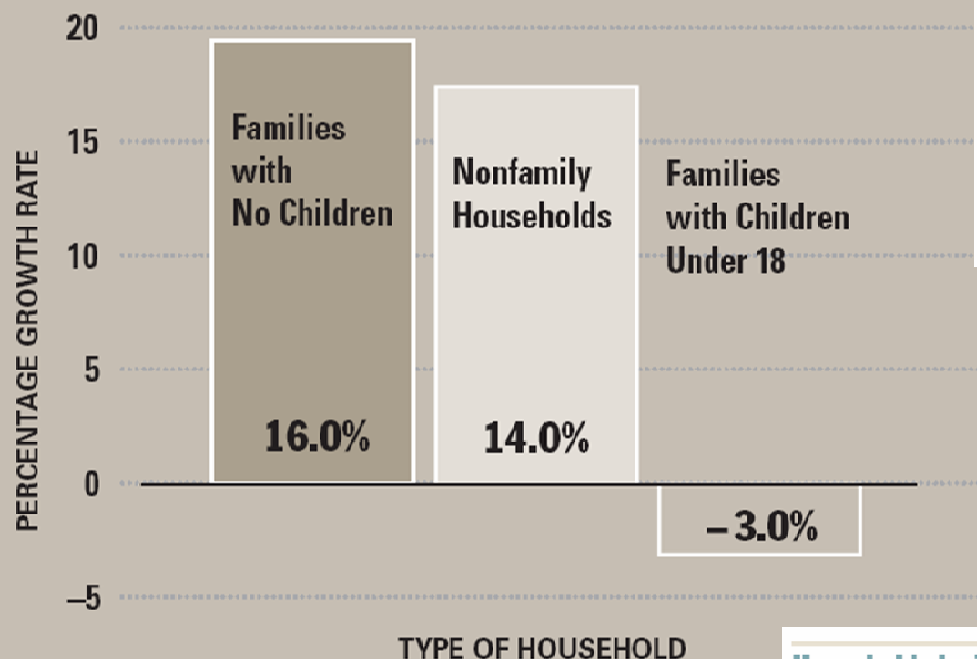
# Proposed + Existing Residential



# Facts About Multi-Family Housing



## PROJECTED HOUSEHOLD GROWTH: 2000-2010



Source: *Projections of Number of Households and Families in the United States: 1995-2010* (Washington, D.C.: U.S. Bureau of the Census, 1996).

## Demographics

- Families make up more than three out of four Gardner area households – significantly higher than the national or regional ratios.

## Why People Rent Apartments

Reason	Percentage of Total
Circumstance	51%
Choice	41
Neither	7
Not Sure	1

Source: Fannie Mae, *Fannie Mae National Housing Survey 2001* (Washington, D.C.: author, 2001).

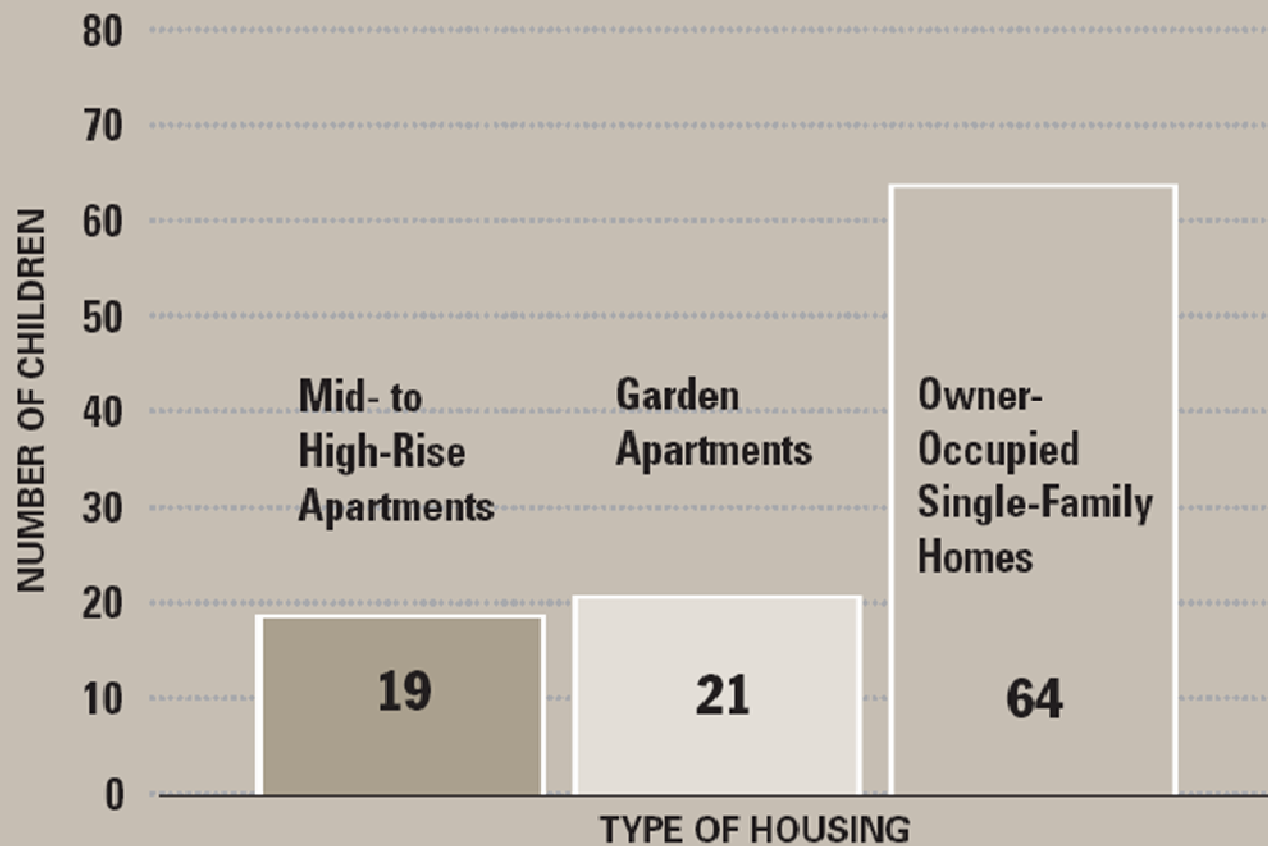
## Households by Type: Selected Years, 1970-2000

(Percentage Distribution)

Household Type	1970	1980	1990	2000
Married Couples with Children	40.3%	30.9%	26.3%	24.1%
Married Couples w/o Children	30.3	29.9	29.8	28.7
Other Family Households	10.6	12.9	14.8	16.0
Men Living Alone	5.6	8.6	9.7	10.7
Women Living Alone	11.5	14.0	14.9	14.8
Other Nonfamily Households	1.7	3.6	4.6	5.7

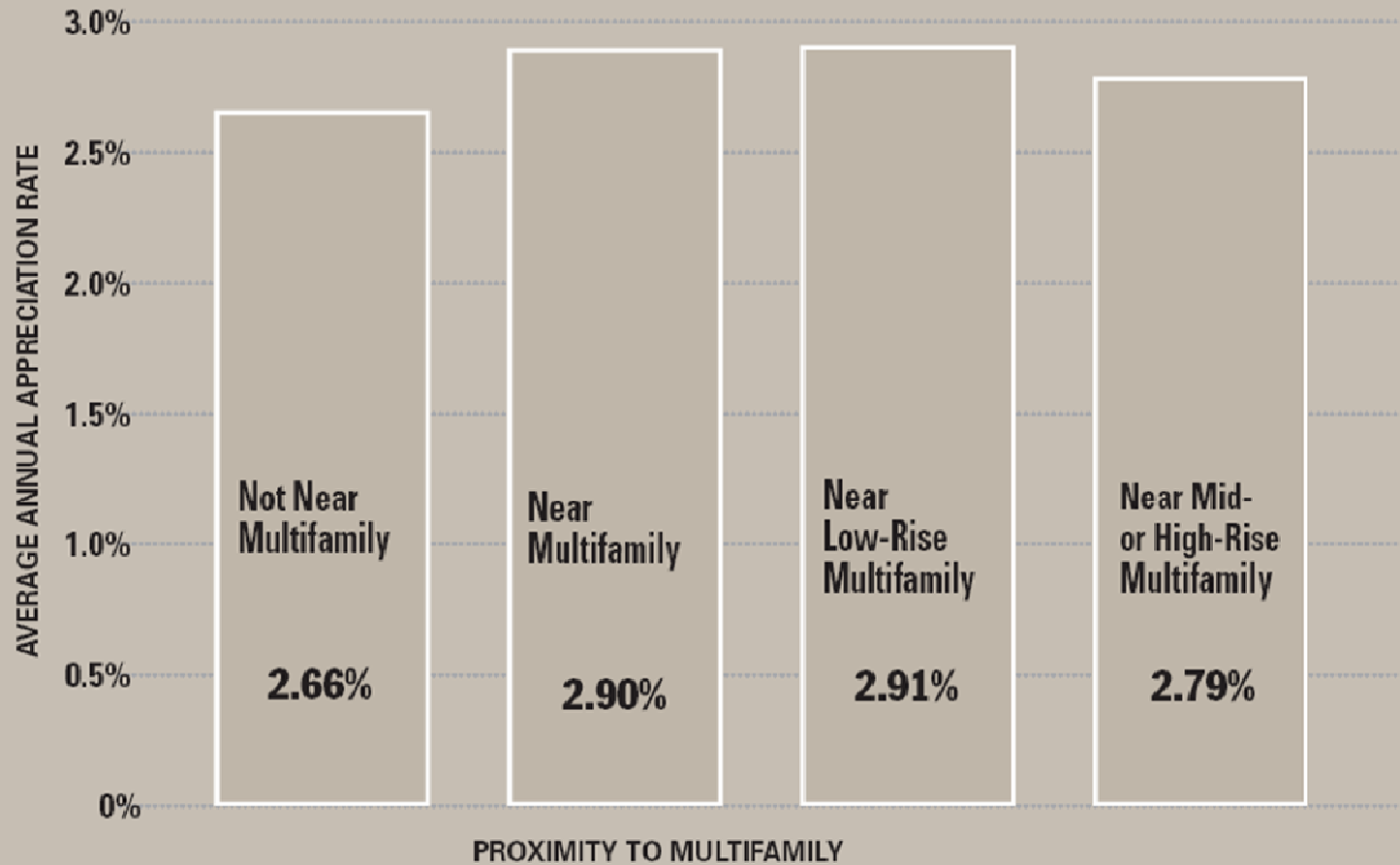
Source: U.S. Bureau of the Census, *Current Population Survey*, March Supplements: 1970-2000 (Washington, D.C.: author, various years).

## NUMBER OF SCHOOL AGE CHILDREN PER 100 UNITS OF NEW HOUSING



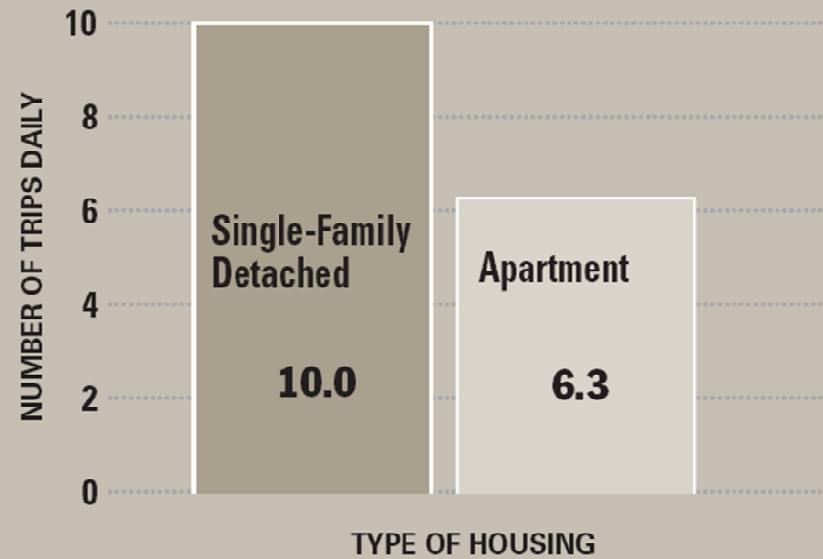
Source: *1999 American Housing Survey* (Washington, D.C.: U.S. Bureau of the Census and U.S. Department of Housing and Urban Development, 1999).

## AVERAGE ANNUAL APPRECIATION FOR SINGLE-FAMILY DETACHED HOMES BY NEARNESS TO MULTIFAMILY BUILDINGS



Source: NAHB computations based on data in the *American Housing Survey: 1997 and 1999* (Washington, D.C.: U.S. Bureau of the Census and U.S. Department of Housing and Urban Development, 1997 and 1999).

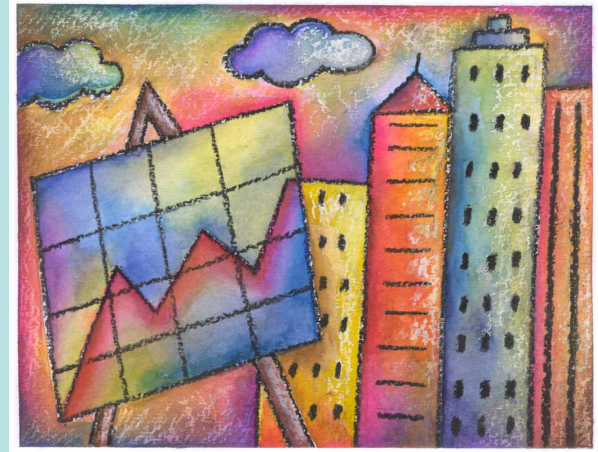
## AVERAGE DAILY CAR TRIPS



Source: Institute of Traffic Engineers, *Trip Generation*, 6th Edition, vol. 1 (Washington, D.C.: Author, 1997).

Automobile Trips Per Housing Unit			
	<i>Single-family detached</i>	<i>Apartment</i>	<i>Difference</i>
Weekday	9.57	6.72	42%
peak AM hour	0.77	0.55	40%
peak PM hour	1.02	0.67	52%
Saturday	10.10	6.39	58%
peak hour	0.94	0.52	81%
Sunday	8.78	5.86	50%
peak hour	0.86	0.51	69%

Source: Institute of Transportation Engineers, *Trip Generation*, 7<sup>th</sup> Edition (Washington, DC: 2003), Volume 2, pp. 268-332.



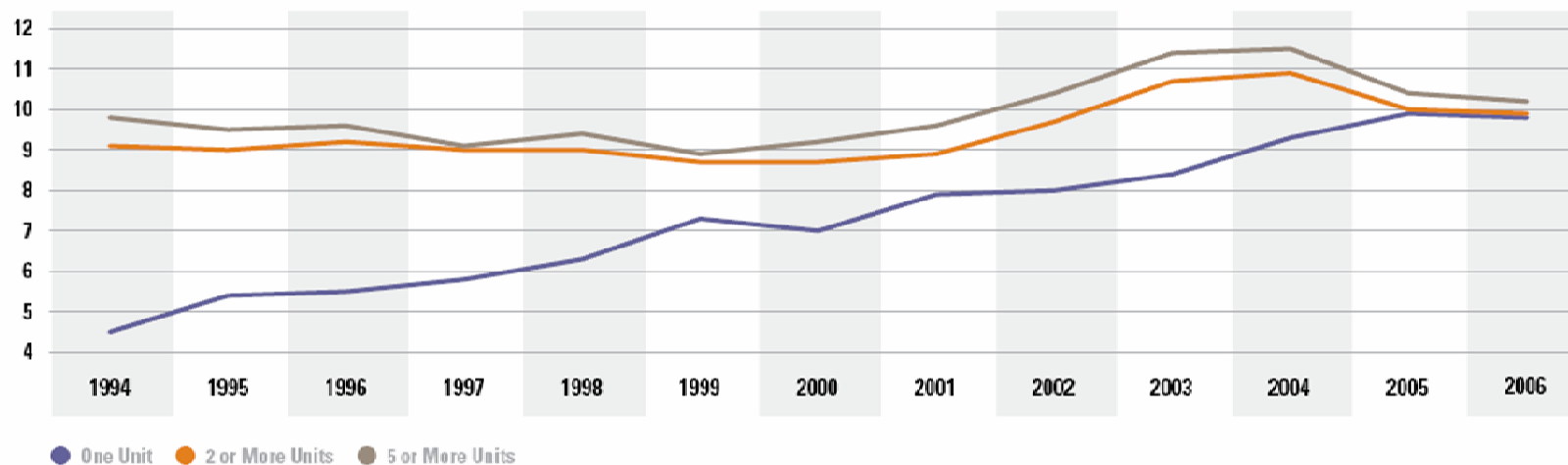
# The Housing Market



**FIGURE 23**

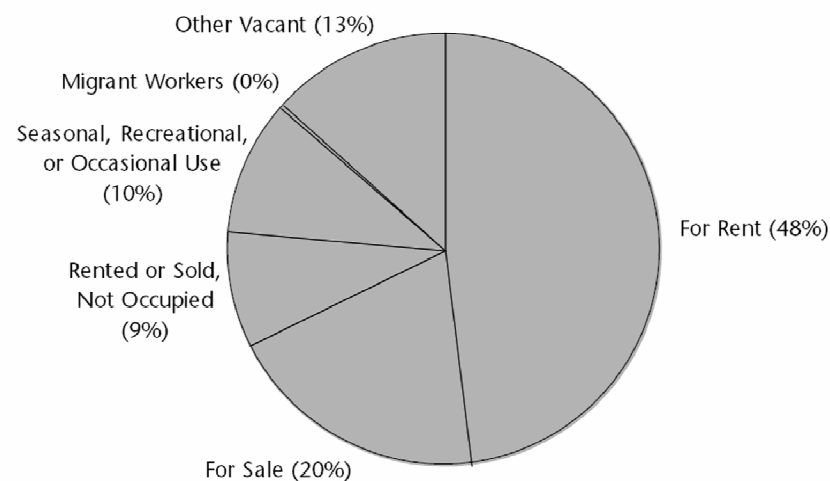
**After Years of Increase, the Single-Family Vacancy Rate Has Levelled Off and Multifamily Markets Have Tightened**

Percent Vacant



Source: US Census Bureau, Housing Vacancy Survey.

**Vacancy Status, 2000**



**Johnson County**

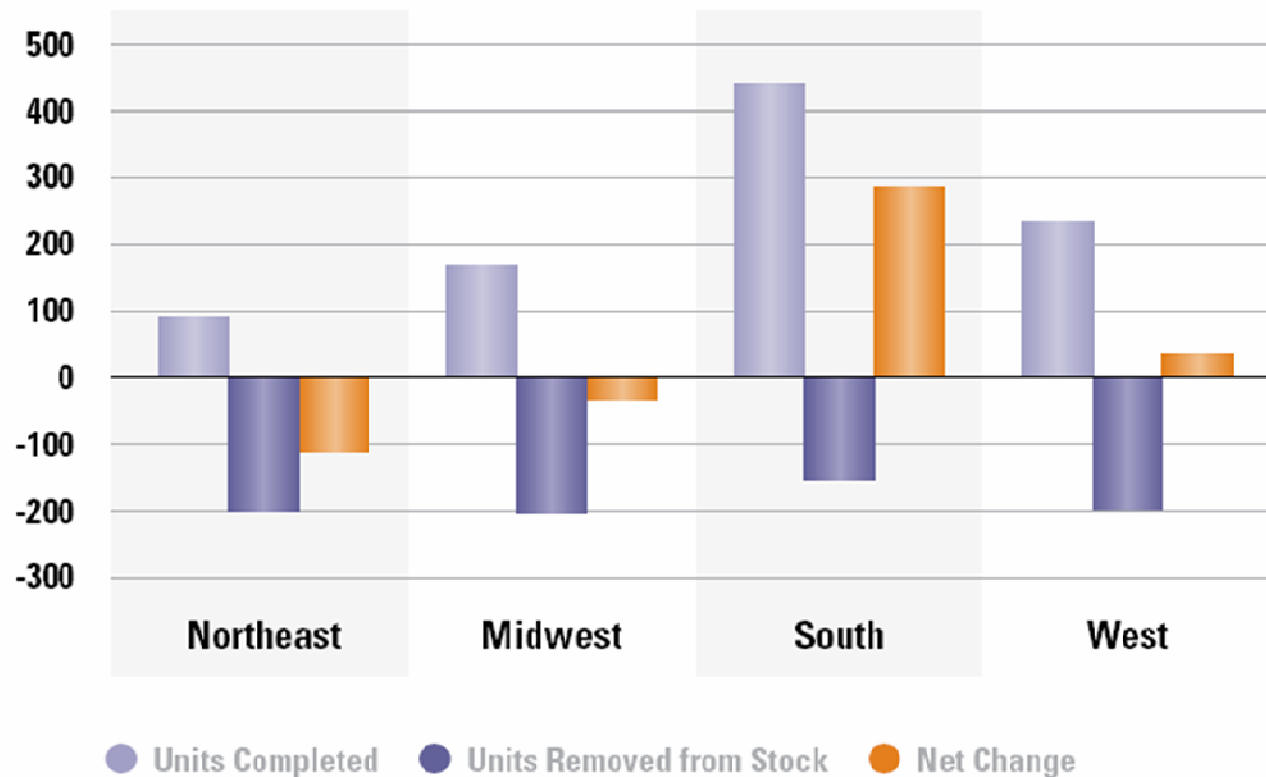
**Housing Market Data**

NUMBER OF HOUSING UNITS, 2000:	181,612	OWNER-OCCUPIED VACANCY RATE:	1%
PERCENT OCCUPIED:	96%	RENTAL VACANCY RATE:	6%
PERCENT VACANT:	4%		

**FIGURE 24**

## Most of the Recent Multifamily Rental Construction Has Merely Offset Losses

Change in Multifamily Rental Stock 2001–2005 (Thousands)



Notes: Multifamily rental units are renter-occupied and vacant for-rent apartments in structures with at least two units. Units removed from stock represent the difference between units completed in 2002–2005 and the net change in units 2001–2005 and include conversions as well as losses to abandonment, demolition, and disasters.

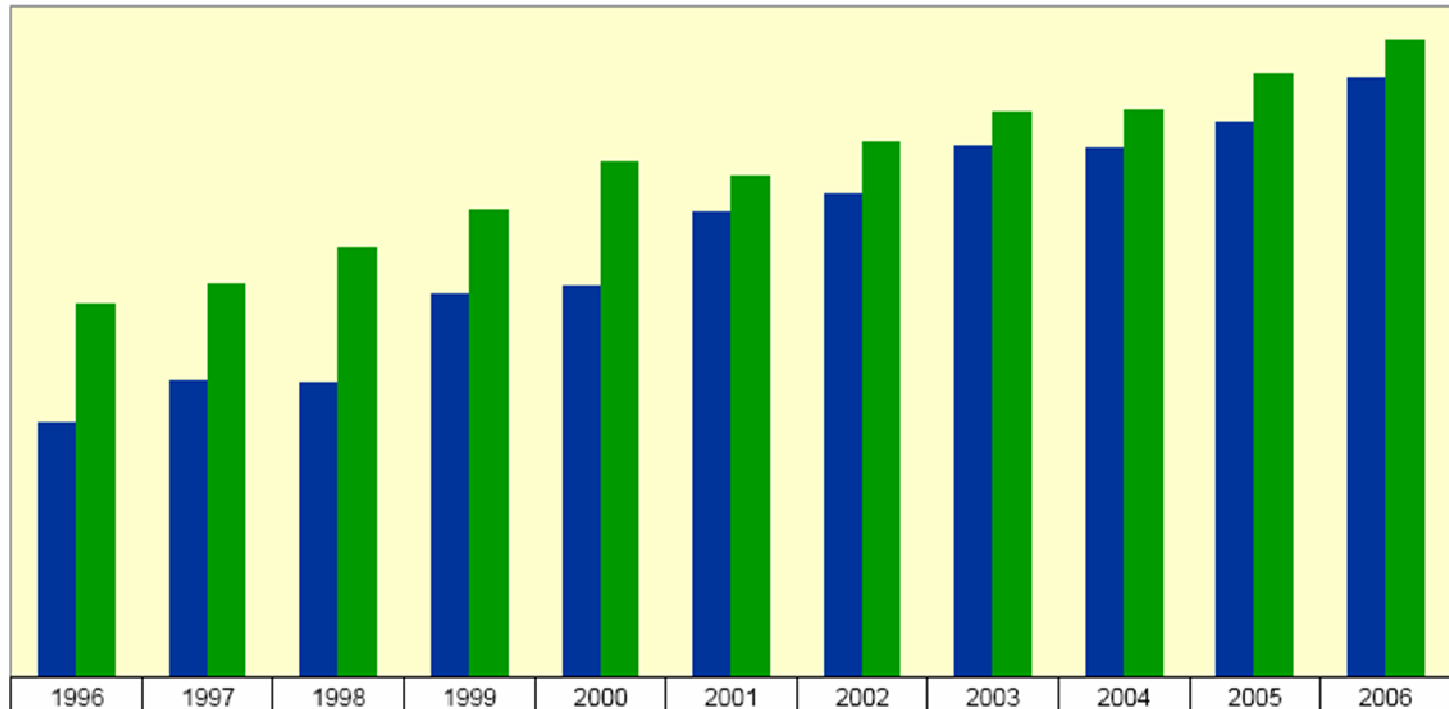
Sources: JCHS tabulations of the 2001 Census Supplemental Survey and the 2005 American Community Survey; US Census Bureau, New Residential Construction.

# Affordability...



# City of Gardner

## average appraised value vs average selling price



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Average Appraisal	\$68,476	\$79,548	\$79,203	\$103,203	\$105,306	\$124,815	\$129,809	\$142,832	\$141,922	\$149,242	\$160,861
Average Sale	\$100,152	\$105,671	\$115,281	\$125,710	\$138,210	\$134,757	\$143,829	\$151,530	\$152,544	\$162,094	\$171,018

**Exhibit ES-3.****Could These Employees Afford a Single Family Home in Johnson County?**

	2002 Average Sales Price	Income Required to Afford Price	Could these employees afford to purchase a single family home?						
			Customer Service	Elementary School Teacher	Food Prep	Janitor	Police Patrol Officer	Registered Nurse	Retail Sales Person
<b>Johnson County (Mean)</b>	\$213,515	\$55,826	No	No	No	No	No	No	No
Countryside	\$185,000	\$48,370	No	No	No	No	No	No	No
De Soto	\$152,938	\$39,987	No	No	No	No	Yes	Yes	No
Edgerton	\$105,942	\$27,700	No	Yes	No	No	Yes	Yes	No
Fairway	\$215,885	\$56,445	No	No	No	No	No	No	No
<b>Gardner</b>	<b>\$143,829</b>	<b>\$37,606</b>	No	No	No	No	Yes	Yes	No
Lake Quivira (1999)	\$323,329	\$84,538	No	No	No	No	No	No	No
Leawood	\$362,818	\$94,863	No	No	No	No	No	No	No
Lenexa	\$224,029	\$58,575	No	No	No	No	No	No	No
Merriam	\$126,621	\$33,106	No	Yes	No	No	Yes	Yes	No
Mission	\$135,007	\$35,299	No	No	No	No	Yes	Yes	No
Mission Hills	\$784,501	\$205,116	No	No	No	No	No	No	No
Mission Woods	\$397,333	\$103,887	No	No	No	No	No	No	No
<b>Olathe</b>	<b>\$178,817</b>	<b>\$46,754</b>	No	No	No	No	No	No	No
Overland Park	\$224,277	\$58,640	No	No	No	No	No	No	No
Prairie Village	\$166,403	\$43,508	No	No	No	No	Yes	Yes	No
Roeland Park	\$127,316	\$33,288	No	Yes	No	No	Yes	Yes	No
Shawnee	\$189,186	\$49,465	No	No	No	No	No	No	No
Spring Hill	\$92,612	\$24,214	Yes	Yes	No	No	Yes	Yes	No
Westwood	\$150,108	\$39,247	No	No	No	No	Yes	Yes	No
Westwood Hills	\$217,600	\$56,894	No	No	No	No	No	No	No

Note: Income required to afford an average priced home assumes 5.5 percent interest rate over a 30-year term with 1.2 percent real estate taxes, closing costs, etc.

Source: Johnson County's Appraiser's Office, "Johnson County Wage & Salary Report - 2003 Edition" CERl, Inc. and BBC Research & Consulting.

**Exhibit II-10.****Median Household Income Change for Kansas, Kansas City MSA and Johnson County, 1990 and 2000**

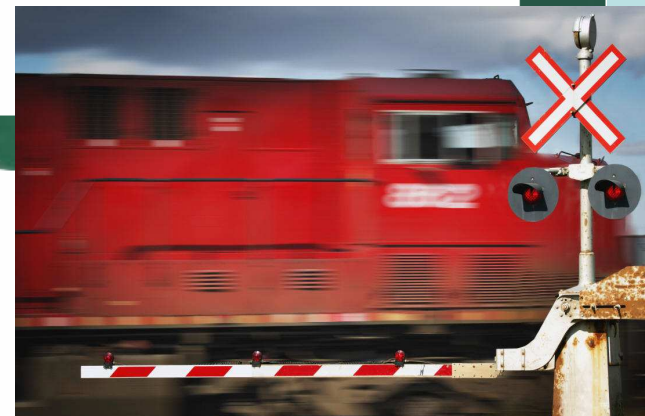
	1990	2000	Percent Change 1990 to 2000
Kansas	\$27,291	\$40,624	49%
Kansas City MSA	\$31,613	\$46,193	46%
Johnson County	\$42,741	\$61,455	44%
Countryside	\$40,179	\$73,958	84%
De Soto	\$33,702	\$46,426	38%
Edgerton	\$30,132	\$50,179	67%
Fairway	\$46,481	\$68,125	47%
Gardner	\$31,355	\$50,807	62%
Lake Quivira	\$83,733	\$111,670	33%
Leawood	\$74,980	\$102,496	37%
Lenexa	\$46,935	\$61,990	32%
Merriam	\$34,013	\$48,455	42%
Mission	\$32,898	\$42,298	29%
Mission Hills	\$122,821	\$188,821	54%
Mission Woods	\$59,512	\$106,885	80%
Olathe	\$39,742	\$61,111	54%
Overland Park	\$44,246	\$62,116	40%
Prairie Village	\$43,750	\$58,685	34%
Roeland Park	\$34,675	\$51,455	48%
Shawnee	\$39,206	\$59,626	52%
Spring Hill	\$31,117	\$45,052	45%
Westwood	\$39,776	\$49,185	24%
Westwood Hills	\$78,859	\$81,812	4%

Source: 1990 and 2000 U.S. Census.

# Wages

- Wages at Intermodal Facility
  - Estimated \$10-\$20 per hour
  - \$20,800 - \$41,600
- Wages at Distribution Facilities
  - Estimated \$10-\$15 (excluding management)
  - \$20,800 - \$31,200
- Employers in Zip Code 66030 Pay on average \$10.90 per hour<sup>1</sup>
- Johnson County
  - Heavy reliance on retail jobs
  - Nationwide, fewer manufacturing jobs
  - Service industry economy

Source: <sup>1</sup>County Economic Research Institute



**Exhibit II-11.**  
**Households Who Earn 80 percent or Less**  
**of Johnson County Median Household Income, 2000**

	Households Who Earn 80% (\$49,164) or Less of County Median Household Income	% of Total Households by Place
Johnson County	65,836	38%
Countryside	21	21%
De Soto	881	53%
Edgerton	221	48%
Fairway	574	31%
Gardner	1,546	47%
Lake Quivira	72	19%
Leawood	1,994	20%
Lenexa	6,024	39%
Merriam	2,442	51%
Mission	2,875	57%
Mission Hills	152	12%
Mission Woods	22	28%
Olathe	11,967	37%
Overland Park	22,376	37%
Prairie Village	3,832	39%
Roeland Park	1,397	47%
Shawnee	7,299	39%
Spring Hill	544	55%
Westwood	372	50%
Westwood Hills	40	23%
Balance of County	1,184	24%

Source: 2000 U.S. Census.

One perception is that Johnson County does not have a large population of households lacking housing choices, yet nearly 40,000 county households are classified as “cost burdened” – households earning 80 percent or less of the county’s median income but are spending more than 30 percent of their income on housing. That number is projected to top 50,000 – nearly one in four households – by 2015.

“I expect to see consistent growth of that number over the next 10 years,” Carpenter said.

The demand for workforce housing extends well above the guidelines for most housing programs. Many of Johnson County’s teachers, police officers, nurses and retail/trade professionals also cannot find affordable housing in the communities that they work. According to the report, a person must have an income of \$56,932 to be able to afford the median-priced home in Johnson County (\$217,747) or at least \$28,080 to be able to afford the median rent (\$702).

In contrast, the Johnson County mean annual wage of an elementary school teacher is \$26,832 while police officers earn \$43,950 and registered nurses earn \$45,846, followed by customer service representatives (\$26,832) and retail salespersons (\$22,381). Because of the lack of affordable housing, many of these professionals who work in Johnson County have chosen to live in other, more affordable communities, with more than 100,000 people commuting to Johnson County to work each day.

“We think that many of these (commuters) are people who work in Johnson County and can’t afford a unit there,” Carpenter said.

The lack of housing choices is most dire for the 66,000 households in Johnson County earning less than 80 percent of the county’s median income, a benchmark used by the U.S. Department of Housing and Urban Development (HUD) in assigning housing aid. Johnson County also has more than 6,000 households living in poverty and 48,700 persons with a disability, one-third of which are elderly – and a limited number of housing units available to meet their income levels, according to the report.

Term	Definition
Cost burdened:	Households paying more than 30 percent of their incomes for housing. Both the Department of Housing and Urban Development and private lenders consider 30 percent of household income an important dividing line at which housing becomes unaffordable.

## High Cost of Living

Percentage of renters spending more than 30 percent of their income on rent.

### Olathe, Kan.

2005 **54.1%**

### New York City

2005 **51.4**

### San Francisco

2005 **45**

Sources: Census Bureau; Andrew A. Beveridge, Queens College Department of Sociology

The New York Times

## Exhibit III-7. Median Rents, 1990 and 2000

Source:  
U.S. Census Bureau, 2000 Census.

	1990	2000	Percent Change
<b>Johnson County</b>	<b>\$515</b>	<b>\$702</b>	<b>36%</b>
Countryside	\$575	\$1,313	128%
De Soto	\$348	\$529	52%
Edgerton	\$422	\$568	35%
Fairway	\$655	\$820	25%
<b>Gardner</b>	<b>\$392</b>	<b>\$646</b>	<b>65%</b>
Lake Quivira	\$0	\$1,075	
Leawood	\$922	\$786	-15%
Lenexa	\$500	\$763	53%
Merriam	\$506	\$664	31%
Mission	\$511	\$652	28%
Mission Hills	\$1,001	\$2,001	100%
Mission Woods	\$0	\$0	
Olathe	\$470	\$612	30%
Overland Park	\$549	\$766	40%
Prairie Village	\$623	\$852	37%
Roeland Park	\$457	\$686	50%
Shawnee	\$462	\$626	35%
Spring Hill	\$454	\$577	27%
Westwood	\$622	\$832	34%
Westwood Hills	\$0	\$1,063	

## Exhibit III-8. Average Rental Rates and Income Required to Afford Average Rent in Johnson County, March 2003

	Olathe	Johnson County (North of I-435)	Johnson County (South of I-435)
<b>1 bedroom:</b>			
Average rent	\$525	\$575	\$595
Income required to afford average rent	\$21,000	\$23,000	\$23,800
<b>2 bedroom:</b>			
Average rent	\$710	\$735	\$805
Income required to afford average rent	\$28,400	\$29,400	\$32,200
<b>3 bedroom:</b>			
Average rent	\$920	\$990	\$1,320
Income required to afford average rent	\$36,800	\$39,600	\$52,800

Source: Apartment Association of Kansas City and BBC Research & Consulting.

**Exhibit IV-2.**  
**Number of Households That Can Afford Median Purchase Price and Rent in Each City of Johnson County**

	Households that can afford average sale price <sup>(1)</sup>		Households that can afford median rent	
	Number of households	Percent of households	Number of households	Percent of households
<b>Johnson County<sup>(2)</sup></b>	<b>126,870</b>	<b>73%</b>	<b>146,836</b>	<b>84%</b>
Countryside	86	85%	77	76%
De Soto	1,166	71%	1,400	85%
Edgerton	413	89%	410	88%
Fairway	1,151	62%	1,492	81%
Gardner	2,475	76%	2,656	82%
Lake Quivira	251	66%	310	82%
Leawood	6,653	68%	9,029	92%
Lenexa	10,933	70%	12,703	82%
Merriam	3,633	76%	3,870	81%
Mission	3,640	72%	3,830	76%
Mission Hills	765	61%	975	78%
Mission Woods	60	77%	N/A	0%
Olathe	24,475	76%	28,329	88%
Overland Park	41,518	69%	48,970	82%
Prairie Village	7,389	76%	7,639	78%
Roeland Park	2,451	82%	2,461	82%
Shawnee	13,738	74%	15,946	86%
Spring Hill	778	78%	826	83%
Westwood	537	72%	543	73%
Westwood Hills	114	67%	132	78%

Note: Income required to afford median rent is based on HUD's 30 percent Area Median Income. Income required to afford a median priced home assumes 5.5 percent interest over a 30-year term with 1.2 percent real estate taxes, closing costs, etc. The median household income for each place was used to determine affordability.

(1) Average sales prices are from the Johnson County Appraiser's Office from 2001 to 2003.

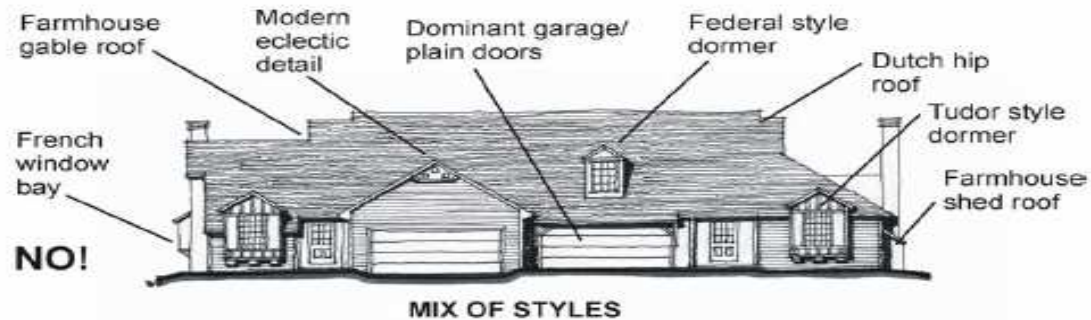
(2) The Balance of Johnson County was not included because median household income is not known for this population.

Source: 2000 U.S. Census Bureau and BBC Research & Consulting.



# Beyond the Numbers...

What Do We Want Multi-Family  
Development To Look Like?



*Figure 12—Within a multi-family development, distinct groups of buildings shall share a common, identifiable, complementary design or style.*



Figure 22—The maximum length of continuous, unbroken, and uninterrupted fence or wall plane shall be 50 feet. Breaks shall be provided through the use of columns, landscaping pockets, transparent sections, and/or a change to different materials.

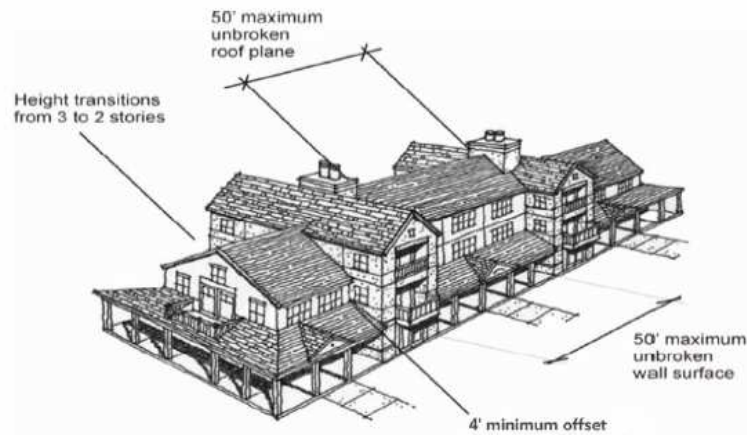


Figure 13—All buildings shall be designed to provide complex massing configurations with a variety of different wall planes and roof planes. Plain, monolithic structures with long, monotonous, unbroken wall and roof plane surfaces of fifty feet (50') or more are prohibited.

Parking structures sited perpendicular to the perimeter street to reduce visual impacts

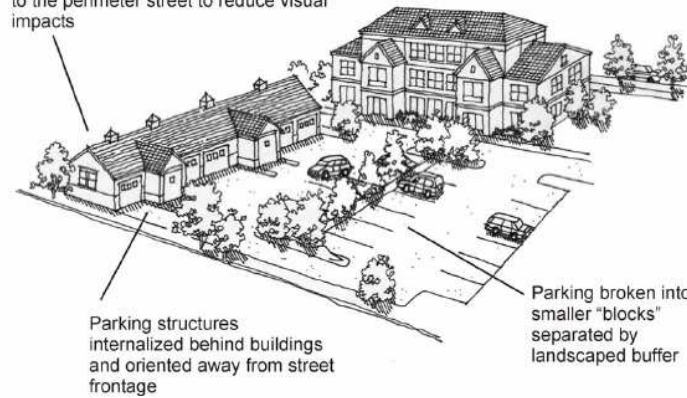


Figure 11—General parking layout guidelines and standards.

LAND PARK, KANSAS

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FEBRUARY 11, 2004

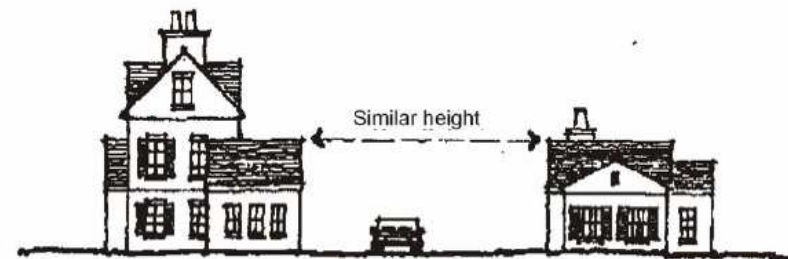


Figure 14—The city may approve a maximum 3% increase in permitted density for multi-family developments that provide a step down by one story in height for at least two ends of each primary multi-family building





# Suggested Reading/Viewing

- Lincoln Institute of Land Policy: Visualizing Density
  - <http://www.lincolninst.edu/subcenters/VD/>
- Creating Great Neighborhoods: Density in Your Community
  - [http://www.lgc.org/freepub/PDF/Land\\_Use/reports/density\\_manual.pdf](http://www.lgc.org/freepub/PDF/Land_Use/reports/density_manual.pdf)
- Designs and Codes that Reduce Crime Around Multi-Family Housing
  - [http://www.lgc.org/freepub/land\\_use/guidelines/anti-crime.html](http://www.lgc.org/freepub/land_use/guidelines/anti-crime.html)
- Compact Development for More Livable Communities
  - [http://www.lgc.org/freepub/PDF/Land\\_Use/focus/compact\\_development.pdf](http://www.lgc.org/freepub/PDF/Land_Use/focus/compact_development.pdf)
- Re-Thinking Density to Create Stronger, Healthier Communities
  - <http://www.nmhc.org/Content/ServeContent.cfm?ContentItemID=3423>
- Urban Advantage
  - <http://www.urban-advantage.com/index.html>

# Sources

- Housing Market and Needs Analysis: Johnson County, Kansas
  - <http://budget.jocogov.org/Community%20Development/documents/Final%20Housing%20Market%20and%20Needs%20Analysis%20Report.pdf>
- Northeast Regional and County Models
  - [http://www.kshousingcorp.org/display/con\\_plan/ConPlan\\_2004\\_16c\\_AppendixB\\_NE.pdf](http://www.kshousingcorp.org/display/con_plan/ConPlan_2004_16c_AppendixB_NE.pdf)
- Higher Density Development: Myth and Fact
  - <http://www.nmhc.org/Content/ServeContent.cfm?contentItemID=3423>
- U.S. Census
  - <http://www.census.gov/>
- The State of the Nation's Housing 2007
  - <http://www.jchs.harvard.edu/publications/markets/son2007/son2007.pdf>
- Multi-Family Residential Design Guidelines and Standards
  - [http://www.opkansas.org/Assets/pds/design\\_guidelines/multifamily\\_guidelines.pdf](http://www.opkansas.org/Assets/pds/design_guidelines/multifamily_guidelines.pdf)
- Rent's Bite Is Big In Kansas
  - [http://www.nytimes.com/2006/10/23/us/23olathe.html?\\_r=1&ei=5070&en=5461883a47e04d4b&ex=1188619200&adxnnl=1&oref=slogin&pagewanted=2&adxnnlx=1190306721-ZdzWoBJDUOg3KZsJVxH+BA](http://www.nytimes.com/2006/10/23/us/23olathe.html?_r=1&ei=5070&en=5461883a47e04d4b&ex=1188619200&adxnnl=1&oref=slogin&pagewanted=2&adxnnlx=1190306721-ZdzWoBJDUOg3KZsJVxH+BA)
- Economic Impact Overview: Intermodal Review Committee
  - May 16, 2006